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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/820,578  
Filing Date: April 08, 2004  
Appellant(s): JOHNSON, LOTT

Kathleen A. Cavanagh  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed June 25, 2008 appealing from the Office action mailed January 25, 2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

4,170,374	Garcia, Fortunato	10-1979
3,016,968	Lenz et al.	01-1962
2,801,309	Higbic et al.	07-1957

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 3,016,968 to Lenz et al., in view of U.S. Patent Number 4,170,374 to Garcia.

Lenz et al. disclose the invention substantially as claimed. Lenz et al. disclose a vacuum actuated door latching assembly having a latch (figure 2) operatively associated with the door (1), a pneumatic actuator (26) operatively associated with the latch for causing the latch to move between the locked and unlocked positions, a vacuum line (37) connected to the pneumatic actuator and adapted to connect to a vacuum source (41) associated with the vehicle, and a control valve (39) disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator, as in claim 1. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) engaging a door (20) in the

same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44), where the biasing device has a spring (54), as in claim 6, where the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door, and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also discloses the latch having a locking lever (5) that is pivotally mounted and movable between a locked and unlocked position, wherein the pneumatic actuator includes an arm (30) that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions (column 2, lines 7-20), as in claim 2, as well as a conventional key lock (22) but wherein the pneumatic actuator is operative to actuate the latch independent of the key lock (column 1, lines 17-21), as in claim 3.

Lenz et al. further disclose the locking lever is of a generally L-shape and includes a terminal end portion (figure 2) that includes a catch (9) for engaging a receiver (4) secured to the door to be latched, as in claim 4.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenz et al., in view of Garcia, as applied above, in view further of U.S. Patent Number 2,801,309 to Higbie et al.

Lenz et al. and Garcia disclose the invention substantially as claimed. However, Lenz et al. and Garcia do not disclose the spring being housed in an elongated sleeve as well as the spring being secured to a threaded bolt held in a threaded support. Higbie et al. teaches of a door switch assembly having a spring (27) positioned adjacent to a door when the door is in a closed position, the spring being disposed within an elongated sleeve (12) mounted to a frame of a vehicle (10), wherein the elongated sleeve is threadably secured to the frame via screw threads (column 2, lines 16-19), such that as soon as the door is opened, the spring will urge a shaft (24) in one direction so that the electric circuit to a suitable source of illumination will be closed through the engagement between the switch contact end portion and the connector (column 3, lines 4-9) and illuminate the contents held within the door and frame in the analogous art of spring biased assemblies contiguous to a vehicle door for the purpose of activating a source of illumination automatically whenever a vehicle door is opened. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate an illumination source, as taught by Higbie et al., where the biasing device of Lenz et al. and Garcia would be mounted via a threaded bolt and contained within an elongated sleeve in order to activate a source of illumination automatically whenever a vehicle door is opened.

Claims 1-8, 10-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, in view of Lenz et al.

Garcia discloses the invention substantially as claimed. Garcia discloses a delivery vehicle (1) having a latch assembly (22) for latching an access door (20) to a load compartment (26) having an engine for powering the vehicle (not shown but having an engine is inherent in

motor vehicles), a compartment for receiving and holding a load (area accessible by opening 26), a sliding door (20) for permitting access to the compartment of the vehicle, as in claim 5, a latch assembly (22) comprising a latch (30) operatively associated with the door for locking the door, the latch being movable between a locked and unlocked position (column 2, lines 60-66), an actuator (34) operatively associated with the latch for causing the same to move between the locked and unlocked position (column 2, line 66-column 3, line 3), and a biasing device (49) for engaging the sliding door and biasing the door towards an open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch), the biasing device being spaced from the latch assembly (figure 2) and operable independently of the latch assembly (the biasing acts directly opposite and independent of the latching motion, wherein the spring biases the latch against the force of the door), and wherein the biasing device includes a spring (54), as in claim 6, disposed adjacent the door and positioned with respect to the door such that when the door assumes a closed position, the spring engages the door and is compressed by the sliding door (column 4, lines 37-44), and wherein when the latch is moved from the locked position to the unlocked position the spring forces the sliding door to open (when the latch is moved from the locked position to the unlocked position, the force of the spring biases the door to an open position), as in claims 1 and 10. However, Garcia does not disclose the latch assembly being vacuum actuated. Lenz et al. teaches of a vehicle having a vacuum actuated latch assembly for latching an access door to a load compartment (figure 1), comprising an engine (column 2, lines 24-26) for powering the vehicle, a compartment (2) for receiving and holding a load, a door (1) for permitting access to the compartment of the vehicle, a vacuum actuated latch assembly (figure 2) for automatically unlocking the door, the vacuum

actuated latch assembly having a latch (figure 2) operatively associated with a door for locking the door, the latch being movable between a locked and an unlocked position, a pneumatic actuator (26) operatively associated with said latch for causing the same to move between the locked and unlocked position, a vacuum line (37) connected to the pneumatic actuator and extending to the engine of the vehicle such that the engine of the vehicle serves as a vacuum source for the pneumatic actuator, and a control valve (39) disposed between the engine and the pneumatic actuator for controlling the actuation of the pneumatic actuator, the pneumatic actuator includes a pneumatic cylinder (figure 2), as in claim 11, as well as the latch includes a locking lever (5) for engaging a receiver (4) secured to the door, and wherein the pneumatic actuator includes an arm (30) for engaging and moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the pneumatic actuator can only be actuated to unlatch the latch when the engine of the vehicle is running (column 2, lines 21-29), as in claim 13, wherein the latch normally assumes a locked position, and wherein the arm that extends from the pneumatic actuator is operative upon the actuation of the pneumatic actuator to engage the latch and move the latch to the unlocked position (column 2, lines 29-44), as in claim 14. Because both Garcia and Lenz et al. teach methods for latching an access door to a load compartment, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly.

Garcia also discloses the latch having a locking lever (68) that is pivotally mounted and movable between a locked and unlocked position, wherein the actuator includes an arm (78) that engages the locking member and moves the locking member in at least one direction between the



locked and unlocked positions (column 4, lines 34-61), as in claim 2, as well as a conventional key lock (108) but wherein the actuator is operative to actuate the latch independent of the key lock (column 4, lines 50-61 teaches the key operated mechanisms function independently of the actuator), as in claim 3, and further discloses the locking lever is of a generally L-shape (figures 2 and 3) and includes a terminal end portion (70) that includes a catch (68) for engaging a receiver (32) secured to the door to be latched, as in claim 4.

Garcia further discloses the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door, and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8

Garcia additionally discloses the latch includes a locking lever (68) for engaging a receiver (32) secured to the door, and wherein the actuator includes an arm (78) for engaging and moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the latch normally assumes a locked position, and wherein the arm that extends from the actuator is operative upon the actuation of the actuator to engage the latch and move the latch to the unlocked position (column 4, lines 24-61), as in claim 14.

Garcia also discloses a method of unlocking a sliding access door (20) to a load compartment of a delivery vehicle (10) comprising an actuator (34) that is operatively associated with a latch (22) that operates to lock the sliding access door and which is movable between a locked position and an unlocked position (column 4, lines 24-61), utilizing a circuit (36) to actuate the actuator and wherein the actuation of the actuator results in the actuator engaging the

latch and moving the latch from the locked position to the unlocked position, permitting the sliding access door to open; shutting the engine off (column 4, lines 24-61), and closing the sliding access door causing the latch to lock the sliding access door (column 4, lines 37-42), biasing the sliding access door towards an open position while the latch assumes the locked position and locks the sliding access door closed (column 4, lines 32-33), wherein biasing the sliding access door towards an open position includes securing a spring (49) adjacent to the sliding access door and extending the spring to where the spring engages a stop (32) that extends from the sliding access door such that the spring pushes on the stop and effectively biases the sliding access door towards an open position (column 4, lines 32-33), and wherein the biasing of the sliding access door towards the open position is independent of the latch that operates to lock the sliding access door and wherein when the latch is moved from the locked position to the unlocked position (as shown in figures 2 and 3), the spring causes the sliding access door to move towards the open position (column 4, lines 32-33), as in claim 15. However, Garcia does not disclose the latch assembly being vacuum actuated. Lenz et al. teaches of a method of unlocking a door to a load compartment of a vehicle by directing a vacuum from an engine of the vehicle through a line to a pneumatic actuator that is operatively associated with a latch that operates to lock the access door and which is movable between a locked position and an unlocked position (column 2, lines 21-29), utilizing the vacuum to actuate the pneumatic actuator and wherein the actuation of the pneumatic actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the access door to open (column 2, lines 7-20), shutting the engine off, and closing the access door causing the latch to lock the access door (column 1, lines 45-49), as in claim 15, as well as including

actuating a control valve that is effective to permit the vacuum to reach the pneumatic actuator and wherein when the vacuum reaches the pneumatic actuator, the pneumatic actuator is actuated which results in the latch being engaged and moved to the unlocked position (column 2, lines 29-36), as in claim 18. Because both Garcia and Lenz et al. teach methods for latching an access door to a load compartment, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly.

Garcia further discloses the actuator includes an arm (78) that extends past a portion of a locking lever (30) that forms a part of the latch assembly, wherein the actuation of the actuator causes the arm to move and to engage a portion of the locking lever which results in the locking lever being pulled from its locked position to an unlocked position (column 3, lines 38-51), as in claim 19, wherein the locking lever is pivotally mounted for movement about an axis (axis defined by element 60) and wherein the actuation of the actuator causes the locking lever to rotate from a locked position to an unlocked position (column 4, lines 24-61), as in claim 20.

Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, in view of Lenz et al., as applied above, in view further of U.S. Patent Number 2,801,309 to Higbie et al.

Garcia and Lenz et al. disclose the invention substantially as claimed. However, Garcia and Lenz et al. do not disclose the spring being housed in an elongated sleeve as well as the spring being secured to a threaded bolt held in a threaded support. Higbie et al. teaches of a door switch assembly having a spring (27) positioned adjacent to a door when the door is in a closed

position, the spring being disposed within an elongated sleeve (12) mounted to a frame of a vehicle (10), wherein the elongated sleeve is threadably secured to the frame via screw threads (column 2, lines 16-19), such that as soon as the door is opened, the spring will urge a shaft (24) in one direction so that the electric circuit to a suitable source of illumination will be closed through the engagement between the switch contact end portion and the connector (column 3, lines 4-9) and illuminate the contents held within the door and frame in the analogous art of spring biased assemblies contiguous to a vehicle door for the purpose of activating a source of illumination automatically whenever a vehicle door is opened. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate an illumination source, as taught by Higbie et al., where the biasing device of Garcia and Lenz et al. would be mounted via a threaded bolt and contained within an elongated sleeve in order to activate a source of illumination automatically whenever a vehicle door is opened.

#### **(10) Response to Argument**

In response to the argument, found on page 6, that the motivation, to decrease the amount of work needed to open the door, to place the biasing device of Garcia into the latch assembly of Lenz et al. is unsupported, nor is there any implicit support for this motivation, the examiner respectfully disagrees. The applicant alleges that there is no problem opening a conventional trunk lid, the examiner half agrees. As the applicant should be aware of work is defined as the transfer of energy from one physical system to another, such that work is equal to the amount of force needed to move a system a desired distance. This being stated, in order to move the trunk lid of Lenz et al. to an open position at a predetermined distance a certain amount of force is

needed, and thus causing work to open the lid. Additionally trunk lids can have some substantial weight to them as well as a close fit between the lid and the contiguous fenders and body panels causing it hard for a user to lift the trunk lid from the secured position. A biasing member placed between the body panels and the trunk lid would lessen the amount of work needed to initially lift the lid, allowing the user to acquire a better hand position to apply the force needed to completely open the lid. Additionally, the examiner cited motivation to decrease the amount of work needed to open a door, not the alleged "lessen the chance the user would squish their fingers between the lid and the body panel." The aforementioned alleged motivation was supplied to the appellant as an argument as to why a user would need an additional component to place a biasing device to engage the lid.

Regarding the argument, found on pages 7 and 8, that Garcia does not disclose a spring that extends between a stop disposed on a door and an area adjacent the door, the examiner respectfully disagrees. As shown in figure 2, the spring does extend between the door and an area adjacent the door. Furthermore, as the claims are absent of direct contact between the spring and the door or an area adjacent to the door. Additionally, the claim includes the verbiage reciting "the spring is adapted to extend...", where it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation by only requires the ability to so perform. It does not constitute a limitation in any patentable sense. And is therefore not given any patentable weight in the claims. *In re Hutchinson*, 69 USPQ 138.

In response to the argument, as found on page 8, that Garcia does not disclose the length of the spring can be adjusted, the examiner respectfully disagrees. The examiner states that it would be obvious to one with ordinary skill in the art that if the biasing device cannot bias the

door, the user would have to adjust the length of the spring to appropriately bias the door. Where Adjustability, where desirable, is a modification that is within the skill of the art. *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954).

Regarding the argument, as found on page 9, that Garcia does not disclose the spring at least partially contained in a sleeve, the examiner respectfully disagrees. Garcia teaches of the use of a boot positioned at the end of the biasing device, where a skirted material extends partially over an end of the spring, and thus, the boot, or sleeve, partially contains the spring. Where the claims are absent of the amount of the spring that is partially contained in the sleeve.

In regards to the argument, as found on page 10, that Higbie does not disclose a spring that is fixed to a shaft, the examiner respectfully disagrees. As fixed is commonly defined as "securely placed or fastened", where the spring of Higbie is securely placed on the shaft. Additionally, the claims are absent of the spring being permanently affixed to the shaft.

Regarding the argument, as found on pages 11 and 12, that the examiner does not disclose why one of ordinary skill in the art would be motivated to combine a vacuum source with the latching assembly of Garcia, the examiner respectfully states that this argument is moot, as basis of the rejection is formed on predictable results, and not on teaching, suggestion, or motivation. The examiner reminds the appellant that KSR forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. Wherein, both Garcia and Lenz et al. teach methods for latching an access door to a load compartment, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly.

In response to the argument, found on page 12, that Garcia does not disclose a spring that extends between a stop disposed on a door and an area adjacent the door, the examiner respectfully disagrees. As shown in figure 2, the spring does extend between the door and an area adjacent the door. Furthermore, as the claims are absent of direct contact between the spring and the door or an area adjacent to the door. Additionally, the claim includes the verbiage reciting "the spring is adapted to extend...", where it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation by only requires the ability to so perform. It does not constitute a limitation in any patentable sense. And is therefore not given any patentable weight in the claims. *In re Hutchinson*, 69 USPQ 138.

Regarding the argument, as found on page 13, that Garcia does not disclose the length of the spring can be adjusted, the examiner respectfully disagrees. The examiner states that it would be obvious to one with ordinary skill in the art that if the biasing device cannot bias the door, the user would have to adjust the length of the spring to appropriately bias the door. Where Adjustability, where desirable, is a modification that is within the skill of the art. *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954).

In regards to the argument, as found on page 13, that Garcia does not disclose the spring at least partially contained in a sleeve, the examiner respectfully disagrees. Garcia teaches of the use of a boot positioned at the end of the biasing device, where a skirted material extends partially over an end of the spring, and thus, the boot, or sleeve, partially contains the spring. Where the claims are absent of the amount of the spring that is partially contained in the sleeve.

Regarding the argument, as found on pages 13 and 14, that Higbie does not disclose a spring that is fixed to a shaft, the examiner respectfully disagrees. As fixed is commonly defined

as "securely placed or fastened", where the spring of Higbie is securely placed on the shaft.  
Additionally, the claims are absent of the spring being permanently affixed to the shaft.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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/Patricia L Engle/

Supervisory Patent Examiner, Art Unit 3673

Conferees:

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